

AMENDMENTS TO THE CLAIMSSub  
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1. (Currently amended) A laser irradiation device comprising:

- a) a laser source for emitting a first laser beam;
- b) a first optical system for converting said first laser beam into a second laser beam;
- c) a diffraction grating light valve ~~Grating Light Valve™~~ having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams; and
- d) a second optical system for directing said signal beams onto a medium, wherein said second laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.

2. (Original) The laser irradiation device according to claim 1, wherein said first optical system comprises a polarization direction converter for converting a polarization of said first laser beam.

3. (Original) The laser irradiation device according to claim 2, wherein said polarization direction converter is a phase plate.

4. (Original) The laser irradiation device according to claim 3, wherein said first laser beam has a peak wavelength within the range from 800 nm to 820 nm.

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5. (Currently amended) A laser irradiation device comprising:

- a) a laser source having a plurality of emitters arranged in a first direction for emitting a first laser beam linearly polarized, said first laser beam being polarized in a second direction substantially perpendicular to said first direction;
- b) a first optical system for converting said first laser beam into a second laser beam;
- c) a diffraction grating light valve ~~Grating Light Valve™~~ having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams; and
- d) a second optical system for directing said signal beams onto a medium, wherein said first optical system comprises a halfwave plate for rotating a polarization of said first laser beam by 90 degrees.

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6. (Original) The laser irradiation device according to claim 5, wherein said first laser beam has a peak wavelength ranging from 800 nm to 820 nm.

7. (Currently amended) A laser irradiation device comprising:

- a) a laser source having a single emitter for emitting a first laser beam substantially linearly polarized;
- b) a first optical system for converting said first laser beam into a second laser beam; said second laser beam being substantially the same in polarization direction as said first laser beam;

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c) a diffraction grating light valve ~~Grating Light Valve™~~ having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams; and

d) a second optical system for directing said signal beams onto a medium,

wherein said laser source is so arranged that said first laser beam is linearly polarized in a direction substantially parallel to said predetermined direction ~~second laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.~~

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8. (Original) The laser irradiation device according to claim 7, wherein said first laser beam has a peak wavelength within the range from 800 nm to 820 nm.

9. (Currently amended) An image recorder for modulating a laser beam to record an image on a recording medium, said image recorder comprising:

a) a laser source for emitting a first laser beam having a peak wavelength ranging from 800 nm to 820 nm;

b) a diffraction grating light valve ~~Grating Light Valve™~~ for modulating said first laser beam in response to an image signal to produce a zero-order diffracted signal beam; and

c) an imaging optical system for irradiating said recording medium with said zero-order diffracted signal beam.

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10. (Currently amended) The image recorder according to claim 9, wherein said diffraction grating light valve ~~Grating Light Valve™~~ comprises a plurality of reflective elements arranged in a predetermined direction, and wherein said first laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.

11. (Currently amended) The image recorder according to claim 10, further comprising

a polarization direction converter disposed between said laser source and said diffraction grating light valve ~~Grating Light Valve™~~ for converting a polarization direction of said first laser beam.

12. (Original) The image recorder according to claim 11, wherein said polarization direction converter is a phase plate.

13. (Currently amended) The image recorder according to claim 9, wherein said laser source has a plurality of emitters arranged in a first direction, said first laser beam being polarized in a second direction substantially perpendicular to said first direction,

said image recorder further comprising

d) a halfwave plate disposed between said laser source and said diffraction grating light valve ~~Grating Light Valve™~~ for rotating a polarization of said first laser beam by 90 degrees.

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14. (Currently amended) The image recorder according to claim 10, wherein  
said laser source is so arranged that said first laser beam is linearly polarized in a  
direction substantially parallel to said predetermined direction ~~emits said first laser beam~~  
~~linearly polarized in the direction substantially parallel to said predetermined direction.~~